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EXAMINER	
GIESY, ADAM	

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2627	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/782,954	ISHIYAMA, YOSHIYUKI	
	Examiner	Art Unit	
	ADAM R. GIESY	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 May 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3,4,6,8,9,11,12,14,16,27-29,31,32,34,36,37 and 39-42* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3,6,8,9,11,14,16,27-29,31,34,36 and 39-42* is/are rejected.

7)☒ Claim(s) *4,12,32 and 37* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2007* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 6, 8, 27, 29, 39, 41, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi (JP Pat. No. 2001028134A) in view of Iida et al. (hereinafter Iida – US Doc. No. 2004/0240351 A) and even further in view of Akiba et al. (hereinafter Akiba – USPN 5,757,742).

Regarding claim 1, Hitoshi discloses a position control method for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or o£ concentric tracks formed on a recording surface of a recording medium without a guide groove, said position control method comprising: a first step of trying to read a predetermined data recorded on the recording medium (see paragraph 0033 – note that this details how light is irradiated on the optical disc in order to read “data”. Examiner will interpret this to mean that the apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition could be found in the instant specification for “predetermined data” as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read “predetermined data” to be any data); a second step of determining whether or not the predetermined data is

readable (see paragraphs 0055-0056 – Examiner notes that when the pit depth changes, the reflected light can skew the tracking or the incoming data and that either of those outcomes would result in data not being read. Examiner also notes that when the pit depth changes are taken into account, then the data can be read properly); and a third step of, according to whether or not the predetermined data is readable, switching a criterion for controlling the position of the object lens based on a tracking error signal (see paragraph 0073),wherein the third step comprises a step of, if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed- polarity tracking error signal (see paragraph 0073), and wherein the predetermined data includes an address data (this is inherent since the optical disc does not contain guide grooves or wobbled groves to denote addressing, then the data contained on the disc must inherently contain the addressing information). Hitoshi does not disclose that the first step is performed when determining a type of the recording medium or that individual lasers are used depending on the media type.

Iida discloses an optical apparatus that utilizes recorded information and disk characteristics in order to determine disc type (see abstract).

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the disc

determining apparatus as disclosed by Iida and the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 6, Hitoshi, Iida, and Akiba disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above. Hitoshi further discloses that the first step is performed during a seek operation of the object lens (see paragraph 0052).

Regarding claim 8, Hitoshi, Iida, and Akiba disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above. Hitoshi further discloses that the first step is performed when reproducing a data recorded on the recording medium (see paragraph 0073).

Regarding claim 27, Hitoshi discloses a storage medium for storing a program executable on a computer for controlling an optical disk device that emits a light beam on a recording surface of a recording medium without a guide groove and receives light reflected from the recording surface of the recording medium, said program comprising: a first step of trying to read a predetermined data recorded on the recording medium in response to a control request for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on the recording surface of the recording medium (see paragraph 0033 – note that this details how light is irradiated on the optical disc in order to read “data”. Examiner will interpret this to mean that the apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition

could be found in the instant specification for "predetermined data" as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read "predetermined data" to be any data); a second step of determining whether or not the predetermined data is readable (see paragraphs 0055-0056 – Examiner notes that when the pit depth changes, the reflected light can skew the tracking or the incoming data and that either of those outcomes would result in data not being read. Examiner also notes that when the pit depth changes are taken into account, then the data can be read properly); and a third step of, according to whether or not the predetermined data is readable, switching a criterion for controlling the position of the object lens based on a tracking error signal (see paragraph 0073), wherein the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed- polarity tracking error signal (see paragraph 0073), and wherein the predetermined data includes an address data (this is inherent since the optical disc does not contain guide grooves or wobbled groves to denote addressing, then the data contained on the disc must inherently contain the addressing information). Hitoshi does not disclose that the first step is performed when determining a type of the recording medium or that individual lasers are used depending on the media type.

Iida discloses an optical apparatus that utilizes recorded information and disk characteristics in order to determine disc type (see abstract).

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the disc determining apparatus as disclosed by Iida and the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 29, Hitoshi discloses a position control device for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on a recording surface of a recording medium without a guide groove, said position control device comprising: a trial unit configured to try to read a predetermined data recorded on the recording medium, wherein trying to read a predetermined data is performed (see Drawing 1, element 2 and laser [not shown]); and a control unit configured to determine whether or not the predetermined data is readable, and according to whether or not the predetermined data is readable, to switch a criterion for controlling the position of the object lens based on a tracking error signal for control of the position of the object lens (see Drawing 1, elements 3 thru 16-2), wherein if the predetermined data is not readable, the control unit switches to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal (see

paragraph 0073), and wherein the predetermined data includes an address data (this is inherent since the optical disc does not contain guide grooves or wobbled groves to denote addressing, then the data contained on the disc must inherently contain the addressing information). Hitoshi does not disclose that the first step is performed when determining a type of the recording medium or that individual lasers are used depending on the media type.

Iida discloses an optical apparatus that utilizes recorded information and disk characteristics in order to determine disc type (see abstract).

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the disc determining apparatus as disclosed by Iida and the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 39, Hitoshi discloses an optical disk device for reproducing predetermined data on a recording medium without a guide groove, said optical disk device comprising: a light source (see Drawing 1 [light not shown]; see also paragraph 0034 – note the use of “optical beam”); an optical system that includes an object lens for condensing a light beam from the light source to a recording surface of the recording

medium and directs a light beam reflected from the recording surface to a predetermined light reception position (see Drawing 1 [lens no explicitly shown]; see also paragraph 0068 – note use of the term “object lens”); a light detection unit arranged at the light reception position (Drawing 1, element 2); a position control device for controlling a position of the object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on the recording surface of the recording medium (see paragraph 0068 – note that the lens can be displaced and therefore can be moved); and a processing unit configured to perform reproducing the predetermined data on a recording medium (see Drawing 1, elements 3 thru 16-2), wherein said position control device comprises: a trial unit configured to try to read a predetermined data recorded on the recording medium (see paragraph 0033 – note that this details how light is irradiated on the optical disc in order to read “data”. Examiner will interpret this to mean that the apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition could be found in the instant specification for “predetermined data” as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read “predetermined data” to be any data); and a control unit configured to determine whether or not the predetermined data is readable (see paragraphs 0055-0056 – Examiner notes that when the pit depth changes, the reflected light can skew the tracking or the incoming data and that either of those outcomes would result in data not being read. Examiner also notes that when the pit depth changes are taken into account, then the data can be read properly), and

according to whether or not the predetermined data is readable, to switch a criterion for controlling the position of the object lens based on a tracking error signal for control of the position of the object lens, wherein if the predetermined data is not readable (see paragraph 0073), the control unit switches to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal (see paragraph 0073), and wherein the predetermined data includes an address data (this is inherent since the optical disc does not contain guide grooves or wobbled groves to denote addressing, then the data contained on the disc must inherently contain the addressing information). Hitoshi does not disclose that the first step is performed when determining a type of the recording medium or that individual lasers are used depending on the media type.

Iida discloses an optical apparatus that utilizes recorded information and disk characteristics in order to determine disc type (see abstract).

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the disc determining apparatus as disclosed by Iida and the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 41, Hitoshi, Iida, and Akiba disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above. Hitoshi further discloses that, if it is determined that the recording medium is a DVD, the tracking error signal is detected using a differential push-pull method (see abstract – Examiner notes that the tracking error signal is found using the push-pull method for all optical discs and that this applies to DVDs).

Regarding claim 42, Hitoshi, Iida, and Akiba disclose all of the limitations of claim 1 as discussed in the claim 1 rejection above. Akiba discloses determining the type of optical disc based on the height of the objective lens to the medium (see column 11, lines 28-37 – note that the differing protective layer heights result in a difference in the focal point on the lens in order to focus the beam spot on the recording layer and thus a height difference in the objective lens).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the disc determining apparatus as disclosed by Iida and the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

3. Claims 3 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hitoshi (JP Pat. No. 2001028134A) in view of Iida et al. (hereinafter Iida – US Doc. No. 2004/0240351 A), in view of Akiba et al. (hereinafter Akiba – USPN 5,757,742), and further in view of Eastman et al. (hereinafter Eastman – US Pat. No. 5,440,534).

Regarding claims 3 and 31, Hitoshi, Iida, and Akiba disclose all of the limitations of claims 1 and 29 (respectively) as discussed in the claim 1 and 29 rejections above. Hitoshi and Iida fail to disclose shifting an on-track position by a predetermined amount.

Eastman discloses a step of: if the predetermined data is not readable, switching to a criterion that includes shifting an on-track determination position in the tracking error signal by a predetermined amount and controlling the position of the object lens with the tracking error signal, said on-track determination position of the tracking error signal being a position at which it is determined that on-track occurs (see column 4, lines 51-53; see also column 3, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the device of Hitoshi with the disc determination of Iida, the individual laser based on the media type as disclosed by Akiba, and the on-track position shifting as disclosed by Eastman, the motivation being to allow the optical head to more easily follow the tracking on a pre-stamped media, such as a CD-ROM.

4. Claims 9, 14, 16, 28, 34, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (hereinafter Kim – US Pat. No. 6,188,657 B1), in view of Akiba et al. (hereinafter Akiba – USPN 5,757,742).

Regarding claim 9, Kim discloses a position control method for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on a recording surface of a recording medium having a plurality of guide grooves, said position control method comprising: a first step of trying to read a predetermined data recorded in the guide grooves or in a region

between two of the guide grooves on the recording medium following a criterion for controlling the object lens based on a tracking error signal with respect to the guide grooves or a tracking error signal with respect to the region between two of the guide grooves (see column 5, lines 25-56 – note that this details how the optical disc can achieve tracking and data reproduction on a land portion of an optical disc in order to read “data”. Examiner will interpret this to mean that the apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition could be found in the instant specification for “predetermined data” as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read “predetermined data” to be any data); a second step of determining whether or not the predetermined data is readable (see column 5, lines 46-64 – note that when a signal is received, then data is being read and that the polarity of the tracking error signal must be switched dependent upon whether the land or groove is being read); and a third step of, according to whether or not the predetermined data is readable, switching the criterion and trying again to read the predetermined data recorded in the guide grooves or in the region between two of the guide grooves (see column 5, lines 21-24; see also column 4, lines 6-16), wherein the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed- polarity tracking error signal (column 5, lines 40-41), wherein the predetermined data includes an address data (see column 5, lines 25-45 – note that the

wobble is being tracked or "read" and that the wobble contains address information), and wherein the first step is performed when determining a type of the recording medium (see column 4, lines 30-35). Hitoshi does not disclose that individual lasers are used depending on the media type.

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 14, Kim and Akiba disclose all of the limitations of claim 9 as discussed in the claim 9 rejection above. Kim further discloses that the first step is performed during a seek operation of the object lens (see column 4, lines 6-16).

Regarding claim 16, Kim and Akiba disclose all of the limitations of claim 9 as discussed in the claim 9 rejection above. Kim further discloses that the first step is performed when reproducing a data recorded on the recording medium (see column 4, lines 6-16).

Regarding claim 28, Kim discloses a storage medium for storing a program executable on a computer for controlling an optical disk device that emits a light beam

on a recording surface of a recording medium having a plurality of guide grooves and receives light reflected from the recording surface of the recording medium, said program comprising: a first step of, in response to a control request for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on the recording surface of the recording medium, trying to read a predetermined data recorded in the guide grooves or in a region between two of the guide grooves on the recording medium following a criterion for controlling the object lens based on a tracking error signal with respect to the guide grooves or a tracking error signal with respect to the region between two of the guide grooves (see column 5, lines 25-56 – note that this details how the optical disc can achieve tracking and data reproduction on a land portion of an optical disc in order to read “data”. Examiner will interpret this to mean that the apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition could be found in the instant specification for “predetermined data” as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read “predetermined data” to be any data); a second step of determining whether or not the predetermined data is readable (see column 5, lines 46-64 – note that when a signal is received, then data is being read and that the polarity of the tracking error signal must be switched dependent upon whether the land or groove is being read); and a third step of, according to whether or not the predetermined data is readable, switching the criterion and trying again to read the predetermined data recorded in the guide grooves

or in the region between two of the guide grooves (see column 5, lines 21-24; see also column 4, lines 6-16), wherein the first step is performed when determining a type of the recording medium (see column 4, lines 30-35), wherein the third step comprises a step of: if the predetermined data is not readable, switching to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed- polarity tracking error signal (column 5, lines 40-41), and wherein the predetermined data includes an address data (see column 5, lines 25-45 – note that the wobble is being tracked or "read" and that the wobble contains address information). Hitoshi does not disclose that individual lasers are used depending on the media type.

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the use of one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 34, Kim discloses a position control device for controlling a position of an object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on a recording surface of a recording medium

having a plurality of guide grooves, said position control device comprising: a trial unit configured to try to read a predetermined data recorded in the guide grooves or in a region between two of the guide grooves on the recording medium following a criterion for controlling the object lens based on a tracking error signal with respect to the guide grooves or the region between two of the guide grooves, wherein trying to read a predetermined data is performed when determining a type of the recording medium (Figure 2, element 28; see also column 4, lines 6-16); and a control unit configured to determine whether or not the predetermined data is readable, and according to whether or not the predetermined data is readable, to change the criterion and to try again to read the predetermined data recorded in the guide grooves or in a region between two of the guide grooves (element 44), wherein if the predetermined data is not readable, the control unit switches to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal (column 5, lines 40-41), and wherein the predetermined data includes an address data (see column 5, lines 25-45 – note that the wobble is being tracked or "read" and that the wobble contains address information). Hitoshi does not disclose that individual lasers are used depending on the media type.

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the use of

one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

Regarding claim 40, Kim discloses an optical disk device for reproducing predetermined data on a recording medium having a plurality of guide grooves, said optical disk device comprising: a light source (Figure 2, element 'LD'); an optical system that includes an object lens for condensing a light beam from the light source to a recording surface of the recording medium and directs a light beam reflected from the recording surface to a predetermined light reception position; a light detection unit arranged at the light reception position (element 28); a position control device for controlling a position of the object lens in a direction perpendicular to a tangential direction of a spiral track or of concentric tracks formed on the recording surface of the recording medium (30); and a processing unit configured to perform reproducing the predetermined data on a recording medium (44), wherein said position control device comprises: a trial unit configured to try to read a predetermined data recorded in the guide grooves or in a region between two of the guide grooves on the recording medium following a criterion for controlling the object lens based on a tracking error signal with respect to the guide grooves or the region between two of the guide grooves (see column 5, lines 25-56; see also column 4, lines 6-16 – note that these passages detail how the optical disc can achieve tracking and data reproduction on a land portion of an optical disc in order to read "data". Examiner will interpret this to mean that the

apparatus is "trying" to read the disc, since no further definition of "trying" could be found in the instant specification. Also, since no definition could be found in the instant specification for “predetermined data” as far as a specific location or type of data, and since address data is encoded within the disc data in optical discs without guide grooves, the Examiner will read “predetermined data” to be any data), wherein trying to read a predetermined data is performed when determining a type of the recording medium (see column 4, lines 30-35); and a control unit configured to determine whether or not the predetermined data is readable, and according to whether or not the predetermined data is readable, to change the criterion and to try again to read the predetermined data recorded in the guide grooves or in a region between two of the guide grooves (see column 5, lines 21-24), wherein if the predetermined data is not readable, the control unit switches to a criterion that includes reversing a polarity of the tracking error signal and controlling the position of the object lens based on the reversed-polarity tracking error signal (column 5, lines 40-41), and wherein the predetermined data includes an address data (see column 5, lines 25-45 – note that the wobble is being tracked or “read” and that the wobble contains address information). Hitoshi does not disclose that individual lasers are used depending on the media type.

Akiba discloses an optical disc apparatus which switches between two lasers depending on the type of media inserted in the apparatus (see Figure 6, elements 2A and 2B).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the apparatus as disclosed by Hitoshi with the use of

one of multiple lasers depending on the inserted medium type as disclosed by Akiba, the motivation being to determine the type of the inserted disc when a new disc is inserted into the drive and use the appropriate wavelength of laser to be able to read/write to that type of medium.

5. Claims 11 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (hereinafter Kim – US Pat. No. 6,188,657 B1), in view of Akiba et al. (hereinafter Akiba – USPN 5,757,742), and further in view of Eastman et al. (hereinafter Eastman – US Pat. No. 5,440,534).

Regarding claims 11 and 36, Kim and Akiba disclose all of the limitations of claims 9 and 34 (respectively) as discussed in the claim 9 and 34 rejections above. Kim fails to disclose shifting an on-track position by a predetermined amount.

Eastman discloses a step of: if the predetermined data is not readable, switching to a criterion that includes shifting an on-track determination position in the tracking error signal by a predetermined amount and controlling the position of the object lens with the tracking error signal, said on-track determination position of the tracking error signal being a position at which it is determined that on-track occurs (see column 4, lines 51-53; see also column 3, lines 48-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the device of Kim with the individual laser based on the media type as disclosed by Akiba, and the on-track position shifting as disclosed by Eastman, the motivation being to allow the optical head to more easily follow the tracking on a pre-stamped media, such as a CD-ROM.

Allowable Subject Matter

6. Claims 4, 12, 32, and 37 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4, 12, 32, and 37 are allowable for the reasons discussed in the previous Office Action, mailed on 2/20/2008.

Response to Arguments

7. Applicant's arguments with respect to claims 1, 6, 8, 9, 14, 16, 27-29, 34, 39, and 40 have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant's arguments filed 5/14/2008 have been fully considered but they are not persuasive.

Applicants argue, on pages 20 and 21 of the Response that Examiner's references only recite media with guide grooves. Examiner respectfully notes that this argument as addressed in the previous Office Action, mailed on 2/20/2008 (see Response to Arguments section of previous Office Action). Examiner notes that the limitations "without guide grooves" are only found in the preamble of claims 1, 27, 29, and 39 and are not found within the limitations of the aforementioned claims. Examiner respectfully reminds Applicant that a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Iida (USPN 6,424,605 B1) discloses an optical recording apparatus wherein individual light sources are switched on depending upon the type of medium in the optical device.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ADAM R. GIESY whose telephone number is (571)272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne R. Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/TAN Xuan DINH/
Primary Examiner, Art Unit 2627
August 18, 2008

ARG 8/17/2008

/Adam R. Giesy/
Examiner, Art Unit 2627